

Appl. No. 10/538,485  
Amdt. Dated August 4, 2009  
Reply to Office Action of May 28, 2009

Attorney Docket No. 81864.0065  
Customer No.: 26021

REMARKS/ARGUMENTS:

Claims 1, 9, 17, and 18 are amended. Support for the amendments to claims 1, 9, 17, and 18 can be found in original claim 3. Claims 1-9 and 11-20 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112:

Claims 1-9 and 11-20 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully traverses this rejection as to amended claims 1-9 and 11-20.

The Office states,

“The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Although the instant specification teaches that  $x$  is in the range of  $0.10 \leq x \leq 0.70$  or  $0.30 \leq x \leq 0.70$ , there is no support in the specification that  $x$  is  $0.14 \leq x \leq 0.70$ .”

In response, Applicant changed “0.14” to “-0.10-” in claims 1, 9, 17, and 18. Support for this amendment can be found in original claim 3. Withdrawal of this rejection is thus respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102/103:

Claims 1-9 and 11-17 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Kijima et al. (JP 02-180004). Applicant respectfully traverses this rejection. Claim 1, as amended, is as follows:

A ferrite magnet powder represented by the composition formula  
 $AFe^{2+}_{a(1-x)}M_{ax}Fe^{3+}_bO_{27}$ , wherein A represents at least one element

selected from the group consisting of Sr, Ba, and Pb; and M represents at least one element selected from the group consisting of Zn, Co, Mn, and Ni,

characterized in that  $0.10 \leq x \leq 0.70$ ,

$1.5 \leq a \leq 2.2$ , and

$12 \leq b \leq 17$ .

Applicant respectfully submits that Kijima cannot anticipate or render obvious claim 1, because Kijima fails to teach or suggest the formula  $A\text{Fe}^{2+}_{a(1-x)}\text{M}_{ax}\text{Fe}^{3+}_b\text{O}_{27}$  that satisfies the above properties.

The Office at p. 8, lines 4-5 of the Office Action states,

“Further, the present claim does not define the limitation of having the  $\text{Fe}^{2+}$  be reduced by Zn.”

Applicant respectfully disagrees. Claim 1 recites the composition formula  $A\text{Fe}^{2+}_{a(1-x)}\text{M}_{ax}\text{Fe}^{3+}_b\text{O}_{27}$ , wherein A represents at least one element selected from the group consisting of Sr, Ba, and Pb; and M represents at least one element selected from the group consisting of Zn, Co, Mn, and Ni. Therefore, in the formula, “ax” clearly represents the amount of an element(s) such as Zn. In addition, the limitation of having the  $\text{Fe}^{2+}$  be reduced by an element(s) such as Zn is clearly defined by the “ $\text{Fe}^{2+}_{a(1-x)}$ ” part of the formula. Accordingly, Applicant respectfully submits that the Office’s statement that “the present claim does not define the limitation of having the  $\text{Fe}^{2+}$  be reduced by Zn” is not justified.

The Office at p. 7, line 20-p. 8, line 1 of the Office Action states,

“In light of the amount of Zn disclosed by Kijima, it would have been obvious to one of ordinary skill in the art at the time of the invention to use amounts of Zn and  $\text{Fe}^{2+}$ , including those presently claimed, in order to produce stabilized W phase that does not deteriorate (pg. 7).”

Applicant respectfully disagrees. Claim 1 of Kijima recites "...the zinc oxide and/or the compound that becomes zinc oxide when heated is added in such a quantity that the Zn content becomes 1.0 to 10 mol% of  $\text{Fe}^{2+}$ ...". Applicant respectfully submits that one of ordinary skill in the art would not understand and/or agree with the Office's statement at p. 7, line 20-p. 8, line 1 of the Office Action based upon the above teaching of Kijima.

In Example 1 of Kijima, the blending amount of  $\text{Fe}_2\text{O}_3$  is 2950 g and the blending amount of Zn is 10 g. In Example 2 of Kijima, the blending amount of  $\text{Fe}_2\text{O}_3$  is 2950 g and the blending amount of Zn is 26 g. Thus, Kijima does not decrease the amount of  $\text{Fe}_2\text{O}_3$  when the amount of Zn is increased. Furthermore, Applicant is unable to find where Kijima teaches or suggests to have the  $\text{Fe}^{2+}$  be reduced by an element(s) such as Zn.

The  $\text{Fe}^{2+}_{a(1-x)}\text{M}_{\text{ax}}$  part of the claimed formula means that the sum of  $\text{Fe}^{2+}$  and M stays "a" because the  $\text{Fe}^{2+}$  amount is reduced with the addition of M, which represents at least one element selected from the group consisting of Zn, Co, Mn, and Ni. This partial substitution of the  $\text{Fe}^{2+}$  site with element M with the sum of  $\text{Fe}^{2+}$  and M stays "a" and enables the improvement of a saturation magnetization  $4\pi\text{Is}$  and a residual magnetic flux density  $B_r$  even in a composition where a large amount of M such as Zn is added.

In contrast, claim 1 of Kijima proposes to add zinc oxide and/or a compound which turns into zinc oxide by heating so that Zn amounts to 1.0 to 10 mol% of  $\text{Fe}^{2+}$ . Therefore, Kijima adds Zn without reducing  $\text{Fe}^{2+}$ . Consequently, with the increase in the Zn amount, the sum of  $\text{Fe}^{2+}$  and Zn becomes too large for the  $\text{Fe}^{2+}$  site and this could lead to a decrease in magnetic properties.

Example 6 of Kijima shows a residual magnetic flux density  $B_r$  of 3.15 kG, which is the maximum value in Kijima, while the examples of the present invention

attain a Br of 4.5 kG or more. Therefore, the present invention attains much higher magnetic properties than those found in Kijima.

In light of the foregoing, Applicant respectfully submits that Kijima cannot anticipate or render claim 1 obvious, because Kijima fails to teach or suggest each and every claim limitation. Claims 2-8 depend from claim 1 and therefore, cannot be anticipated or rendered obvious for at least the same reasons as claim 1. Claims 9 and 11-17 require a composition similar to that discussed above and therefore, cannot be anticipated or rendered obvious for reasons discussed above. Withdrawal of this rejection is thus respectfully requested.

In addition, with respect to claims 7 and 8, Applicant notes that claim 7 requires that the ferrite magnet powder has a saturation magnetization of 5.0 kG or more, and claim 8 requires that the saturation magnetization is 5.1 kG or more. Kijima does not disclose the saturation magnetization. However, Applicant believes that since Zn is added without reducing Fe<sup>2+</sup>, a saturation magnetization as high as 5.0 kG or 5.1 kG would not be reached.

In summary, Kijima fails to teach or suggest that the sum of Fe<sup>2+</sup> and M stays "a" by reducing the Fe<sup>2+</sup> amount with the addition of M, which represents at least one element selected from the group consisting of Zn, Co, Mn, and Ni. Kijima also fails to teach or suggest the composition defined by claims 1-9 and 11-17. Therefore, the present invention allows for a saturation magnetization and a residual magnetic flux density Br higher than that achieved in Kijima.

#### CLAIM REJECTIONS UNDER 35 U.S.C. § 103:

Claims 7, 8, 11, and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kijima and further in view of Toyota (U.S. Patent No. 5,866,028). Applicant respectfully traverses this rejection.

Claims 7, 8 and 11, 13 depend from claims 1 and 9, respectively; and therefore, cannot be rendered obvious over Kijima for at least the same reasons discussed above. Toyota cannot remedy the defect of Kijima and is not relied upon by the Office for such. Instead, the Office cites Toyota for teaching a saturation magnetization of 5.0 kG and a residual magnetic flux density of 4.8 kG.

In light of the foregoing, Applicant respectfully submits that the cited references cannot render claims 7, 8, 11, and 13 obvious, because the cited references fail to teach or suggest each and every claim limitation. Withdrawal of this rejection is thus respectfully requested.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kijima in view of Toyota and further in view of Taguchi et al. (U.S. Patent No. 6,258,290). Applicant respectfully traverses this rejection.

Claim 12 depends from claim 9 and therefore, cannot be rendered obvious over Kijima for at least the same reasons discussed above. Toyota and Taguchi cannot remedy the defect of Kijima and neither reference is relied upon by the Office for such. Instead, the Office cites Toyota for teaching a W-type ferrite magnet having a saturation magnetization of 5.0 kG and Taguchi for teaching a magnet powder having a squareness of more than 80%.

In light of the foregoing, Applicant respectfully submits that the cited references cannot render claim 12 obvious, because the cited references fail to teach or suggest each and every claim limitation. Withdrawal of this rejection is thus respectfully requested.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kijima and further in view of Taguchi. Applicant respectfully traverses this rejection.

Claim 18 requires a composition similar to that of claims 1-9 and 11-17 and therefore, cannot be rendered obvious over Kijima for reasons discussed above. Taguchi cannot remedy the defect of Kijima and is not relied upon by the Office for such. Instead, the Office cites Taguchi for teaching that a hexagonal magnet ferrite powder is used in a magnetic layer over a substrate.

In light of the foregoing, Applicant respectfully submits that the cited references cannot render claim 18 obvious, because the cited references fail to teach or suggest each and every claim limitation. Withdrawal of this rejection is thus respectfully requested.

Claims 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kijima in view of Taguchi and further in view of Toyota. Applicant respectfully traverses this rejection.

Claims 19 and 20 depend from claim 18 and therefore, cannot be rendered obvious over Kijima and Taguchi for at least the same reasons discussed above. Toyota cannot remedy the defect of Kijima and Taguchi and is not relied upon by the Office for such. Instead, the Office cites Toyota for teaching that a residual magnetic density is of 4.8 kG and a saturation magnetization of 5.0 kG.

In light of the foregoing, Applicant respectfully submits that the cited references cannot render claims 19 and 20 obvious, because the cited references fail to teach or suggest each and every claim limitation. Withdrawal of this rejection is thus respectfully requested.

Applicant believes the foregoing amendments comply with requirements of form and thus may be admitted under 37 C.F.R. § 1.116(b). Alternatively, if these amendments are deemed to touch the merits, admission is requested under 37 C.F.R. § 1.116(c). In this connection, these amendments were not earlier

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presented because they are in response to the matters pointed out for the first time in the Final Office Action.

Lastly, admission is requested under 37 C.F.R. § 1.116(b) as presenting rejected claims in better form for consideration on appeal.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310)785-4600 to discuss the steps necessary for placing the application in condition for allowance.

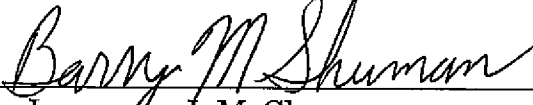
If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,

HOGAN & HARTSON L.L.P.

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By:



Lawrence J. McClure  
Registration No. 44,228  
Attorney for Applicant(s)

1999 Avenue of the Stars, Suite 1400  
Los Angeles, California 90067  
Telephone: 310-785-4600  
Facsimile: 310-785-4601